

## ABSTRACT

A method for analysing in real-time in a paper machine or board machine the surface structure of a web (1) of paper or board which method comprises the direction of an imaging system towards a pre-determined area (3) of the web (1), the arrangement of an illumination system to illuminate the region from a pre-determined direction with obliquely incident light, and the arrangement of an image analysis system in association with the imaging system. Furthermore, the method comprises, according to the invention, an image capture step (7) in which the imaging system is caused to take several digital images of the web under the said oblique incident illumination and during a pre-determined period, which images form an image sequence that images a series of surface sections (4, 4', 4'') along a band (8) in the web (1), and an evaluation step (9) that is carried out by the image analysis system and which comprises an image analysis step (11), which in turn comprises a first analysis operation (16) in which the variance of the pixel values in each pixel row in each image in the image sequence is determined within a pre-determined wavelength band, and a second analysis operation (17) in which the mean value of the variances of all pixel rows of all images in the image sequence is calculated. The invention also concerns a device for the execution of the method.